

# **Recall 203 Dealer Best Practice**

Date: October 12, 2021

Attn: Dealer Principal/General Manager/Service Manager/Parts Manager

Subject: HMA Recall 203 – Nu 2.0L Atkinson Engine Inspection and Replacement - (TSB #21-01-054H-1) - Remedy Available v3

Updates To This Document	<u>Date</u>
• TSB# 21-01-054H-1 – The TSB supersedes TSB # 21-01-054H to revise the Parts and Warranty Information sections, specifically related to add engine and service kit part numbers and op codes for engine replacement.	10/12/21

# \*\*\* IMPORTANT Dealer Stock and Retail Vehicles \*\*\*

As required by federal law, dealer must not deliver new vehicle for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo, and rental vehicle prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information Screen (VIS)" via WEBDCS to identify open Campaigns.

# \*\*\*\*A 'stop sale' has been initiated by Hyundai Motor America ("HMA") for Recall Campaign 203 for the affected vehicles listed below currently in Dealer's stock inventory.\*\*\*\*

If there are affected vehicles in Dealer's stock inventory, please ensure that all Dealer stock vehicles have had all recalls completed prior to sale to customer. Dealer will forfeit incentives if vehicles with an open recall are sold to customers. Please note that vehicles in dealer's used stock inventory must also have all open recalls completed prior to placing into customer use.

# Affected Vehicles

- Certain 2019-2020MY Hyundai Elantra (AD) vehicles equipped with 2.0-litre "NU' MPI engines and produced from November 1, 2018 through July 6, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. Market
- Certain 2019-2021MY Hyundai Kona (OS) vehicles equipped with 2.0-litre "NU' MPI engines and produced from November 3, 2018 through September 1, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. Market
- Certain 2019-2021MY Hyundai Veloster (JS) vehicles equipped with 2.0-litre "NU' MPI engines and produced from November 2, 2018 through May 27, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. Market

# **Description**

Hyundai is initiating a new recall campaign 203, a safety recall to address a condition involving engine malfunctions resulting in a vehicle stall and/or fire in certain model year 2019-2020 Hyundai Elantra, 2019-2021 Hyundai Kona, and 2019-2021 Hyundai Veloster vehicles equipped with 2.0-liter "Nu" MPI engines and produced for sale in the U.S. and Canada. Hyundai is initiating this action to ensure the safety and compliance of its vehicles.

The engines in the subject vehicles may have been assembled using piston oil rings that were produced with inconsistent heat treating by the piston oil ring supplier resulting in excessive oil ring hardness. Excessive hardness can cause chipping of the piston oil ring's outer periphery, which could lead to scuffing of the engine's cylinder bore. A damaged cylinder bore could create accelerated oil consumption, which may then cause abnormal knocking noise from the engine and/or illumination of the oil pressure warning light. Continual operation of the vehicle in this condition could result in a seized connecting rod bearing, which could cause damage to the engine block and eventually stall the vehicle. In limited instances, a seized connecting rod could puncture the engine block and cause engine oil to leak, which, in the presence of hot surfaces, could increase the risk of a fire.



# **Service Action**



**Reservation** – Always check the Vehicle Information Screen in WebDCS for open campaigns and recalls, and advise the customer on time requirements.



**Readiness** – Review this announcement and the accompanying FAQs, if any, with all Service and Parts staff including Reservationist/BDC. Also, complete all applicable training, check your reservation capacity settings (you can set separate capacities for every recall/campaign), confirm email addresses for campaign appointments, and that you have all necessary tools, campaign parts and shop equipment as needed.

- Be prepared to put customers in an SRC or alternative transportation, if needed.
- Recommended Level of Technician Certification and/or Completed Coursework to perform TSB work: Certified Service Technician with 6 months or more practical experience testing Hyundai vehicles with the GDS Mobile (Inspection only)
- Successfully completed Engine Technology Classroom or the equivalent training (Engine Replacement)



**Reception** – Always check the Vehicle Information Screen in WebDCS for open campaigns and recalls, and print a copy for technicians. Provide SRC or an alternative vehicle, as needed. If a customer has declined the campaign, note this on the repair order and request the customer's signature next to the statement.

Provide customer with transportation options such as an SRC, alternative vehicle, shuttle, or rideshare.



**Repair** – Always plug in the GDS before starting the repair. Make sure to complete an MPI on all vehicles and Quality Control your work.

- Refer to TSB# 21-01-054H-1 for inspection and service procedures.
- Recommend minimum "Certified Service Technician with 6 months or more practical experience testing Hyundai vehicles with the GDS Mobile"
  - If a 'PASS' test result is achieved, the measured engine vibration level is determined to be normal. The engine inspection is complete.
  - If a 'NO PASS' test result is achieved, the measured engine vibration level is determined to be abnormal.
    - The PA and Engine Diagnosis Worksheet will be automatically created and saved in DRAFT.
    - Complete the information in the Engine Diagnosis Worksheet and apply the Service Manager's signature before submitting the PA.
    - Refer to the service procedure in the appropriate Shop Manual to replace the engine long block with the service kit.
- The Nu Atkinson Engine Vibration Inspection can also be viewed with the following QR code/link:
  - Link: Hyundai Service Learning Campaign 203 Service Procedure
  - QR Code:



- Key Points:
  - A Galaxy tablet device equipped with a headphone/microphone port is required. Certain models without this port (such as the S6 tablet) are not compatible for this inspection. Do not use a USB Type C-to-3.5mm Headphone Jack Adapter.
  - The engine coolant temperature should be closer to normal operating temperature of "85°C / 185°F" (or



higher) to help expedite the actual engine inspection procedure.

- During the initial vehicle inspection, engine oil level that is abnormally low (near or below "L" for relatively low miles since last oil change or top off) due to a possible accelerated engine oil consumption condition will need further diagnosis through Techline.
- If a test is repeated for any reason and there is a discrepancy in the results, refer to HTSS "Fix it Right" under symptom "Campaign".



**Return** – Review all completed campaigns and repairs to answer any customer questions. Also, schedule the customer's next service.



Reconnect – Follow up for customer satisfaction.

# Parts Parts

Each dealer has initially been supplied one tool for this recall.

SST Information:		
TOOL NAME	FIGURE / TOOL NUMBER	NOTE
Knock Sensor Cable	G1XTD-CP200-QQH	<ul> <li>This tool has been initially supplied by HMA through MPA. Each dealer will receive one at the start of this recall.</li> <li>A Galaxy tablet device equipped with a headphone / microphone port is required. Certain models without this port (such as the Samsung Galaxy Tab S6) are not compatible to use with this tool. Do not use a USB Type C-to-3.5mm Headphone Jack Adapter.</li> </ul>

# Warranty

#### Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL P/N	NATURE CODE	CAUSE CODE
ALL (AD/OS/JS)	11D110R0	ENGINE VIBRATION INSPECTION	0.3	21101-113ZRQQHRM	B25	ZZ1
2019-20MY Elantra (AD)	11D110R1	ENGINE VIBRATION INSPECTION AND (QQHRM) ENGINE REPLACEMENT	6.6			
2019-21MY Kona (OS) w/ 2WD	11D110R2	ENGINE VIBRATION INSPECTION AND (QQHRM) ENGINE REPLACEMENT	6.7			
2019-21MY Kona (OS) w/ AWD	11D110R3	ENGINE VIBRATION INSPECTION AND (QQHRM) ENGINE REPLACEMENT	7.0			
2019-21MY Veloster (JS)	11D110R4	ENGINE VIBRATION INSPECTION AND (QQHRM) ENGINE REPLACEMENT	6.8			

NOTE 1: Submit claim on Campaign Claim Entry Screen

**NOTE 2:** If a part that is not covered by this recall is found in need of replacement while performing the repair for this TSB, and the affected part is still under warranty, please submit a separate claim using the same Repair Order. If the affected part is out of warranty, submit a prior approval request for goodwill consideration prior to performing the work.

**NOTE 3:** QQHRM remanufactured engine P/N meets OE standards. HMA Warranty Policy special exception applies for this campaign for PA approved engine replacements in newer vehicles.

**NOTE 4:** If the Engine Vibration Inspection cannot be performed on a non-running vehicle due to internal engine damage, submit PA first for the applicable engine part number for engine R&R, then perform the required Engine Vibration Inspection after engine replacement.



# **Customer Notification**

NHTSA has posted this recall. Owners were previously mailed interim notification letters in June 2021. Owners were mailed notification letters regarding remedy available in late August 2021.

Thank you for your prompt attention to this important safety matter and continued commitment to Hyundai customers.

Hyundai Motor America



### Q&A

#### Q&A: Recall 203 – Nu Engine Piston Oil Ring

#### Q1: What is the issue?

A1: The engines in the subject vehicles may have been assembled using piston oil rings that were produced with inconsistent nitride heat treating by the piston oil ring supplier resulting in excessive oil ring hardness. Excessive hardness can cause chipping of the piston oil ring's outer periphery, which could lead to abnormal scuffing of the engine's cylinder bore. A damaged cylinder bore could create accelerated oil consumption, which may then cause abnormal knocking noise from the engine and/or illumination of the oil pressure warning light.

#### Q2: What are the affected vehicles?

A2: The subject vehicles include:

- Certain 2019-2020MY Hyundai Elantra vehicles (AD) equipped with 2.0-litre "NU' MPI engines and produced from November 1, 2018, through July 6, 2020, by Hyundai Motor Company in South Korea for sale in the U.S. Market
- Certain 2019-2021MY Hyundai Kona vehicles (OS) equipped with 2.0-litre "NU' MPI engines and produced from November 3, 2018, through September 1, 2020, by Hyundai Motor Company in South Korea for sale in the U.S. Market
- Certain 2019-2021MY Hyundai Veloster vehicles (JS) equipped with 2.0-litre "NU' MPI engines and produced from November 2, 2018, through May 27, 2020, by Hyundai Motor Company in South Korea for sale in the U.S. Market

#### Q3: What is the safety concern?

A3: Continual operation of the vehicle in this condition could result in a seized connecting rod bearing, which could cause damage to the engine block and eventually stall the vehicle. In limited instances, a connecting rod could puncture the engine block and cause engine oil to leak, which, in the presence of hot surfaces, could increase the risk of a fire.

#### Q4: Have there been any accidents or injuries?

A4: As of the date of this filing, Hyundai is not aware of any confirmed crashes or injuries attributable to the recall condition. Five (5) vehicle fires with an undetermined root cause have been confirmed in the U.S. market.

#### Q5: What will be done during the recall service at the dealer?

**A5:** Hyundai Motor America plans to notify owners of affected vehicles to return their vehicles to their Hyundai dealers for an engine inspection test to determine the presence of damage on the cylinder bore and piston skirt. If abnormalities relating to damage is found, the engine will be replaced with a new one.

As an added level of protection, all affected vehicles will receive an enhanced engine control software update containing a new Piston Noise Sensing System ("PNSS") program. The PNSS continuously monitors engine vibrations for unusual patterns potentially indicating an abnormal condition with the engine, such as a damaged cylinder bore and/or piston skirt, which could lead to an engine failure. The PNSS is currently under development and will be applied when available.

The remedy procedure will be performed at no charge. Hyundai will provide reimbursement to owners for repairs according to the plan submitted to NHTSA on May 16, 2018.

#### Q6: When will owners be notified?

A6: NHTSA has posted this recall. Owners were previously mailed interim notification letters in June 2021. Owners were mailed notification letters regarding remedy available in late August 2021.

#### Q7: Will a vast majority of the affected vehicles have a 'PASS' inspection result rather than a 'NO PASS' result?

A7: Yes, it is expected for a vast majority of the affected vehicles to receive a 'PASS' inspection result rather than a 'NO PASS' result. If a 'PASS' result is achieved, the vehicle has completed recall 203 and a claim needs to be submitted by the dealership to close out the recall.

#### Q8: What happens if a 'NO PASS' result is achieved?

A8: If a 'NO PASS' result is received, the dealer needs to follow the appropriate steps in the TSB to submit the PA (PA and Engine Diagnosis Worksheet will be created in DRAFT) and refer to the service procedures in the appropriate Shop Manual to replace the engine long block with the Service Kit.

#### <u>Q9: Why is a QQHRM (Remanufactured) engine being used instead of a QQH (New) engine?</u>

A9: The QQHRM remanufactured engine meets New (Original Equipment "OE") standards. HMA is making a warranty policy special exception for this campaign/recall for PA approved engine replacements in newer vehicles.



	Key Contact Inform	ation		
Dealer Support	Contact Information	Description		
Parts	HyundaiPartsHotline@MobisUSA.com 1-800-545-4515	Parts ordering hotline		
Techline	1-800-325-6604	Vehicle Technical Support for Hyundai Dealer Technicians		
Warranty HELPREP Line	1-877-446-2922	Warranty Claim questions for Hyundai Dealers		
Warranty Prior Approval (PA) Center	PA@hmausa.com	Warranty Prior Approval (PA) Center for Hyundai Dealers		
Xtime Technical Support	Support@xtime.com 1-866-984-6355	Assistance with Car Care Scheduling: • Appointment / Shop Capacity Management / Campaign Integration / Operation Codes		
AutoLoop Technical Support	Support@autoloop.com 1-877-850-2010	Assistance with Car Care Scheduling: <ul> <li>Appointment / Shop Capacity Management / Campaign Integration / Operation Codes</li> </ul>		
CDK Technical Support	https://serviceconnect.support.cdk. com/	Assistance with Car Care Scheduling: <ul> <li>Appointment / Shop Capacity Management / Campaign Integration / Operation Codes</li> </ul>		
Customer Support	Contact Information	Description		
Hyundai Customer Care Center (Recall/Campaign Questions)	1-855-671-3059	Customer questions or concerns related to <u>recall or</u> <u>service campaigns</u>		
Hyundai Recall /Campaign Website	www.hyundaiusa.com/recall	Updated information related to specific recall or service campaign		
Hyundai Customer Care Center (General Questions)	1-800-633-5151	Customers general questions, non-campaign related		
Hyundai Roadside Assistance	1-800-243-7766	Hyundai Roadside Assistance		
	Key Reference Inform	nation		
Name		Source		
Campaign Central	Consolidated repository of recall and service campaign dealer best practices. Located on the service tab homepage in <u>www.HyundaiDealer.com</u>			
Car Care Scheduling (Xtime) - Tutorials	www.HyundaiDealer.com > Service > Dealer Resources > Documents Library > Car Care Scheduling			
Car Care Scheduling (Xtime) - Recall Appointment Notification	<ol> <li>Log into Xtime</li> <li>Under the menu at the top left, select 'CONFIGURE'</li> <li>Under the dealership tab, click "EMAIL COMMUNICATION"</li> <li>Slide the toggle to "ADVANCED"</li> <li>Populate as many e-mails as desired in the "PARTS DESK EMAIL FIELD"</li> </ol>			
Parts – Campaign Parts Management (CPM) Procedure	As applicable; <u>www.HyundaiDealer.com</u> > Parts > Documents Library > Campaign Parts Management			
	SRC Documentation: <u>www.HyundaiDeale</u> TSD: <u>www.HyundaiDealer.com</u> > Service ta Insurance: <u>www.HyundaiDealer.com</u> > Se	-		
Technical Service Bulletin (TSB)	www.HyundaiDealer.com > Service tab > Hyundai Tech Info			
Uncompleted Campaign VIN Listing	A listing of vehicles is located on WEBDCS > SERVICE tab > select UNCOMPLETED CAMPAIGN VIN LISTING – Dealer Stock (New, SRC, CPO, etc.) and Retailed.			
Recall Campaign Website	www.hyundaiusa.com/recall			
NHTSA Website	www.safercar.gov			



# Appendix

Updates To This Document	
Remedy Available: TSB# 21-01-054H	08/20/21
Remedy Not Yet Available	05/03/21